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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,351	07/31/2003	Ken L. Chang	K35A1339	3978
35219	7590	03/04/2005	EXAMINER	
WESTERN DIGITAL TECHNOLOGIES, INC. 20511 LAKE FOREST DR. -C205 LAKE FOREST, CA 92630			WATKO, JULIE ANNE	
		ART UNIT	PAPER NUMBER	
		2653		
DATE MAILED: 03/04/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/632,351	CHANG ET AL	
	Examiner	Art Unit	
	Julie Anne Watko	2653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-16 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 31 July 2003 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 10 and 14-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 recites the limitation "the first and second through bores" in line 2. There is insufficient antecedent basis for this limitation in claim 8, from which claim 10 depends.

Claims 14 and 15 recite the limitation "The disk drive of claim 5" in line 1. Claim 5 is drawn to a head stack assembly, not to a disk drive; thus, it is unclear whether claims 14-15 are drawn to a head stack assembly or to a disk drive.

Claim 16 is indefinite by virtue of its dependence from an indefinite claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

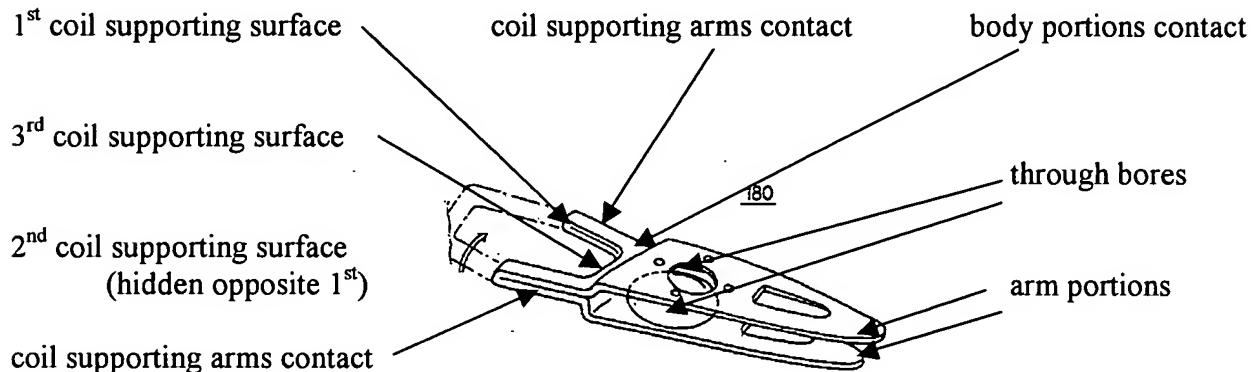
4. Claims 1-5, 7-11 and 13-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Ohba et al (US Pat. No. 6836387 B2).

The product by process limitations in these claims (e.g. "stamped") are directed to the product *per se*, no matter how actually made, *In re Hirao*, 190 USPQ 15 at 17 (footnote 3). See also *In re Brown*, 173 USPQ 685; *In re Luck*, 177 USPQ 523; *In re Fessman*, 180 USPQ 324; *In re Avery*, 186 USPQ 161; *In re Wertheim*, 191 USPQ 90 (209 USPQ 554 does not deal with this issue); *In re Marosi et al*, 218 USPQ 289; and particularly *In re Thorpe*, 227 USPQ 964, all of which make it clear that it is the patentability of the final structure of the product "gleaned" from the process limitations or steps, which must be determined in a "product by process" claim, and not the patentability of the process limitations. Moreover, an old or obvious product produced by a new method is not a patentable product, whether claimed in "product by process" claims or not. Note that the applicant has the burden of proof in such cases, as the above case law makes clear.

As recited in independent claim 1, Ohba et al shows an actuator arm assembly for a disk drive, comprising: a first stamped actuator arm including a first arm portion, a first body portion defining a first body surface, the first stamped actuator arm further including a first coil-supporting arm portion defining a first pair of coil supporting arms for supporting a coil of a voice coil motor; a second stamped actuator arm including a second arm portion, a second body portion defining a second body surface, the second stamped actuator arm further including a second coil-supporting arm defining a second pair of coil supporting arms for supporting the coil of the voice coil motor; wherein the first and second stamped actuator arms are configured such that when the first stamped actuator arm is attached to the second stamped actuator arm, the first pair of coil supporting arms faces and is in contact with the second pair of coil supporting arms

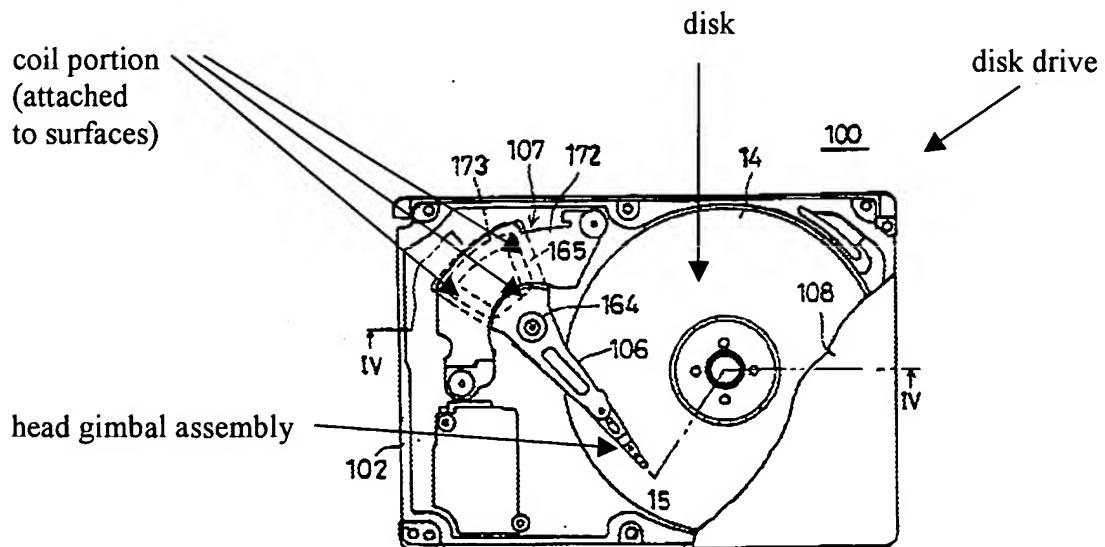
to define first and second coil attachment surface, and the first body surfaces faces and is in contact with the second body surface to define a third coil attachment surface (see Fig. 6A).

Ohba et al, Fig. 6A



As recited in independent claim 5, in addition to the above teachings, Ohba et al show a head stack assembly for a disk drive, comprising a first head gimbal assembly coupled to the actuator arm assembly, and a coil portion attached to the first, second and third coil attachment surfaces (see Fig. 3A).

Ohba et al, Fig. 3A



As recited in independent claim 11, in addition to the above teachings, Ohba et al show a disk drive 100 comprising a disk 14 (see Fig. 3A, for example).

As recited in claims 2, 7 and 13, Ohba et al show that the first, second and third coil attachment surfaces are configured to enable the coil to be attached to the actuator arm assembly by a first layer of adhesive between the first coil attachment surface and the coil, by a second layer of adhesive between the second coil attachment surface and the coil and by a third layer of adhesive between the third coil attachment surface and the coil. Regarding the limitation “enable the coil to be attached”: It is noted by the Examiner that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In the instant case, the structure is capable of being attached to a coil in the recited fashion.

As recited in claims 3, 9 and 15, to the extent understood, Ohba et al show that the first stamped actuator arm defines a first surface that defines a first through bore, the second stamped actuator arm defines a second surface that defines a second through bore (see Fig. 6A above).

As recited in claims 4, 10 and 16, to the extent understood, Ohba et al show a collar 181 fitted within the first and second through bores (see Fig. 6B).

As recited in claims 8 and 14, to the extent understood, Ohba et al show a second head gimbal assembly coupled to a second actuator arm portion (see Fig. 4, for example, which shows two HGAs including heads 15).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 6 and 12 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ohba et al (US Pat. No. 6836387 B2).

As recited in claims 6 and 12, Ohba et al are silent regarding whether the coil portion is attached to the surfaces by adhesive. The Examiner believes that the adhesive limitation is inherent to the reference; however, even if Ohba et al were connected in some other fashion, the use of adhesives was notoriously well known in the art at the time, and would have been obvious. See Zhao et al (US Pat. No. 6683756 B1) col. 2, lines 17-18 (“adhesive is typically used to attach the voice coil to the yoke”), for example.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Zhao et al (US Pat. No. 6683756 B1) teach that it is desirable to attach a coil to a yoke using adhesive on an increased surface area (see Fig. 2). Liu et al (US Pat. No. 6687094 B2) show a head actuator comprising plural arms in contact (see Figs. 5-6).
9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Anne Watko whose telephone number is (703) 305-7742. The examiner can normally be reached on Tues. & Thurs. until 9PM, Wed. & Fri. until 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (703)305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Julie Anne Watko
Primary Examiner
Art Unit 2653

February 27, 2005
JAW

